

CHUSKA ENERGY COMPANY

3315 BLOOMFIELD HIGHWAY • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

P.O. BOX 780 • FARMINGTON, NEW MEXICO 87499

30 November, 1990

State of Utah Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Building, Suite 350
Salt Lake City, Utah 84180-1203

RECEIVED
DEC 03 1990
DIVISION OF
OIL GAS & MINING

Ref: Application for Permit to Drill
Taipan 5F-1 Well, San Juan County, Utah

Gentlemen

Attached for your examination and approval is the original and two copies of an Application for Permit to Drill the Taipán 5F Well No. 1 in San Juan County, Utah. This well will be drilled as part of an ongoing exploration and development program.

The location for this well falls outside the guidelines for the State of Utah spacing requirements. However, the severe topography of the area surrounding the desired location is such as to preclude the well being located in accordance with State requirements and yet remain in a position which will allow the well bore to penetrate geological structures which have been identified by seismic interpretation. We therefore apply for an exception to the General State Spacing requirements on topographic grounds. Chuska Energy controls the acreage surrounding the proposed site, as indicated on the attached land plat.

Please advise if you require additional information concerning this application. Chuska Energy will greatly appreciate your prompt consideration.

Sincerely,


Larry G. Sessions
Operations Manager

LGS/csw
File: C:\WP51\TAIPAN.5F\APDCOVER

encl.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐

GAS
WELL ☐

OTHER

SINGLE
ZONE ☐

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Chuska Energy Company

3. ADDRESS OF OPERATOR

P.O. Box 780, Farmington, New Mexico 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At Surface

2380' FNL, 2230' FWL

At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

9 1/2 miles South of Aneth, Utah

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST*
PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any) 910'

16. NO. OF ACRES IN LEASE

49,997

17. NO. OF ACRES ASSIGNED
TO THIS WELL

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

15,620'

19. PROPOSED DEPTH

6,090' GR AKAH

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5,015' GR

22. APPROX. DATE WORK WILL START*

5-1-91

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24 lb	500'	371 sx 'G' + 2% CaCl ₂
7 7/8"	5 1/2"	15.5 lb	6,090'	841 sx 'G', 65:35 Poz + 6% Gel

Refer to attached 10-Point Drilling Plan etc.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM : If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

Christopher S. Hill

TITLE Petroleum Engineer

DATE 30 November, 1990

(This space for Federal or State office use)

API

PERMIT NO.

43-037-31594

APPROVAL DATE

ACCEPTED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

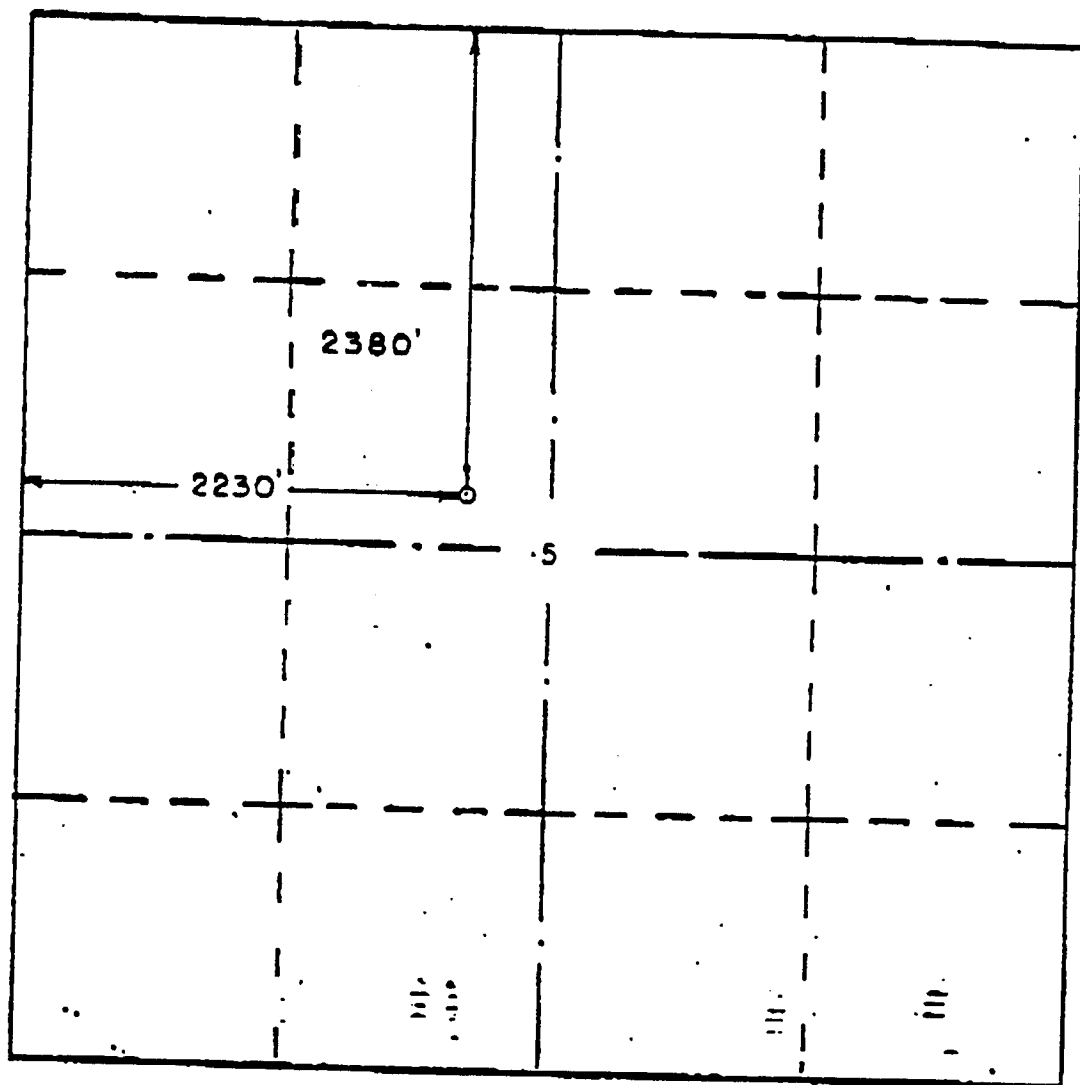
DATE: 12-13-90

BY: JAY Matthews

*(See Instructions On Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

WELL LOCATION AND ACREAGE DEDICATION PLAT



WELL LOCATION DESCRIPTION:

CHUSKA ENERGY COMPANY, Taipan 5 - F - 1

2380' FNL & 2230' FWL

Section 5, T.43 S., R.25 E., SLM

San Juan, UT.

5015' ground elevation

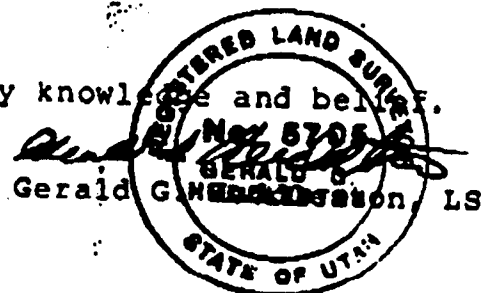
State plane coordinates from seismic control:

x = 2,671,547

y = 158,697

The above plat is true and correct to my knowledge and belief.

15 November 1990



Gerald G. Gibson, LS

CHUSKA ENERGY COMPANY

10 POINT DRILLING PLAN

Taipan 5F Well No. 1
Section 5, Township 43S, Range 25E
2380' FNL, 2230' FWL
San Juan County, Utah

1. SURFACE FORMATION

Geological name of surface formation: Morrison

2. ELEVATION

Surface elevation is 5,015' GR.

3. ESTIMATED FORMATION TOPS

<u>Depth</u>	<u>Formation</u>	<u>Sub Sea Elevation</u>	
Surface	Morrison	+ 5,015'	
1,063'	Navajo	+ 3,952'	
1,858'	Chinle	+ 3,157'	
2,898'	DeChelly	+ 2,117'	
3,175'	Organ Rock	+ 1,840'	
3,813'	Cedar Mesa	+ 1,202'	
4,813'	Hermosa	+ 202'	
5,703'	Upper Ismay	- 688'	
5,803'	Lower Ismay	- 788'	
5,910'	Desert Creek	- 895'	Primary Objective
6,033'	Akah	- 1,018'	
6,090'	Total Depth	- 1,075'	

4. PROPOSED CASING/CEMENTING PROGRAM

	<u>Depth</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Coupling</u>
Surface	500'	8 5/8"	24 lb	K-55	STC
Production:	6,090'	5 1/2"	15.5 lb	K-55	STC

Surface Cementing:

371 sx (427 ft³) Class 'G' cement with 2% CaCl₂ and 1/4 lb/sk Celloflake. Weight = 15.8 ppg, yield = 1.15 ft³/sk. Slurry volume calculated at 100% excess over annular volume.

Production Cementing:

First Stage

T.D. to 3,500' (stage collar @ \pm 3,500'). Lead with 207 sx Class 'G' cement, 65:35 Pozmix, with 6% gel and 1/4 lb/sk Celloflake. Weight = 12.7 ppg, yield = 1.85 ft³/sk. Tail with 178 sx Class 'G' cement with 2% CaCl₂. Weight = 15.8 ppg, yield = 1.15 ft³/sk. Total of 589 ft³. Bring Class 'G' slurry to 500' above top of Upper Ismay. Cement volumes calculated at 30% excess in open hole. WOC 4 hours between stages.

Second Stage

3,500' to surface. Lead with 355 sx Class 'G' cement, 65:35 Pozmix with 6% gel and 1/4 lb/sk Celloflake. Weight = 12.7 ppg, yield = 1.85 ft³/sk. Tail with 100 sx Class 'G' cement with 2% CaCl₂. Weight = 15.8 ppg, yield = 1.15 ft³/sk. Total of 772 ft³. Cement volumes calculated at 30% excess in open hole.

Note: Exact slurry volumes for the production string will be adjusted according to the caliper log which will be run prior to cementing. Special adjustments may be necessary if significant amounts of salt are drilled.

5. BLOWOUT PREVENTER (See attached schematics)

As abnormal pressure is not anticipated, a 2,000 psi BOP system would be sufficient for the drilling of this well. However, due to availability constraints, a 3,000 psi system will be used, as per the attached Exhibits "A" and "B". This will be a 10" x 900 Series double ram preventer, equipped with a set of pipe and blind rams.

An accumulator system, with a pressure capacity sufficient to operate the rams three complete cycles without rig power, will be required as part of the rig equipment.

6. PROPOSED MUD PROGRAM

Surface to 3,500'

Fresh water, gel, lime and native solids. Weight 8.3 - 8.7 ppg. Gel/lime sweeps as necessary for hole cleaning.

3,500' to T.D.

Low solids, non-dispersed polymer system. Weight 8.6 - 9.5 ppg. Gel/lime sweeps as hole conditions dictate for hole cleaning. Fluid loss to be maintained at 15 - 20 cc. Fluid loss to be further reduced to 15 cc or less prior to coring, logging or DSTs.

7. AUXILIARY EQUIPMENT

- A. A kelly cock will be installed during drilling operations, with handle available on the rig floor.
- B. Floor (stabbing) valves will be available, on the rig floor at all times, with necessary subs to fit all of the drilling assemblies.
- C. Mud will be the circulating fluid. No abnormal formation pressures are expected.

8. WELL EVALUATION

Open hole electric logging program will consist of a minimum program of DLL-MSFL-SP-GR-Cal, FDC-CNL-GR-Lithodensity from T.D. to 4,500'.

Coring and/or drill stem testing will be as per the wellsite geologist's recommendations, based on shows. A mud logging unit will be utilized during drilling operations from at least 500' above the Upper Ismay.

9. ABNORMAL PRESSURES/GAS

Abnormal pressures are not anticipated. Monitoring of gas and hydrocarbon shows will be by wellsite mud logging unit. H₂S gas is not anticipated, however regular checks will be made while drilling the well.

10. TIMING

The drilling and evaluation of this well is estimated to be 16 days. Anticipated spud date is 5-1-91.

EXHIBIT "A"
BLOWOUT PREVENTER

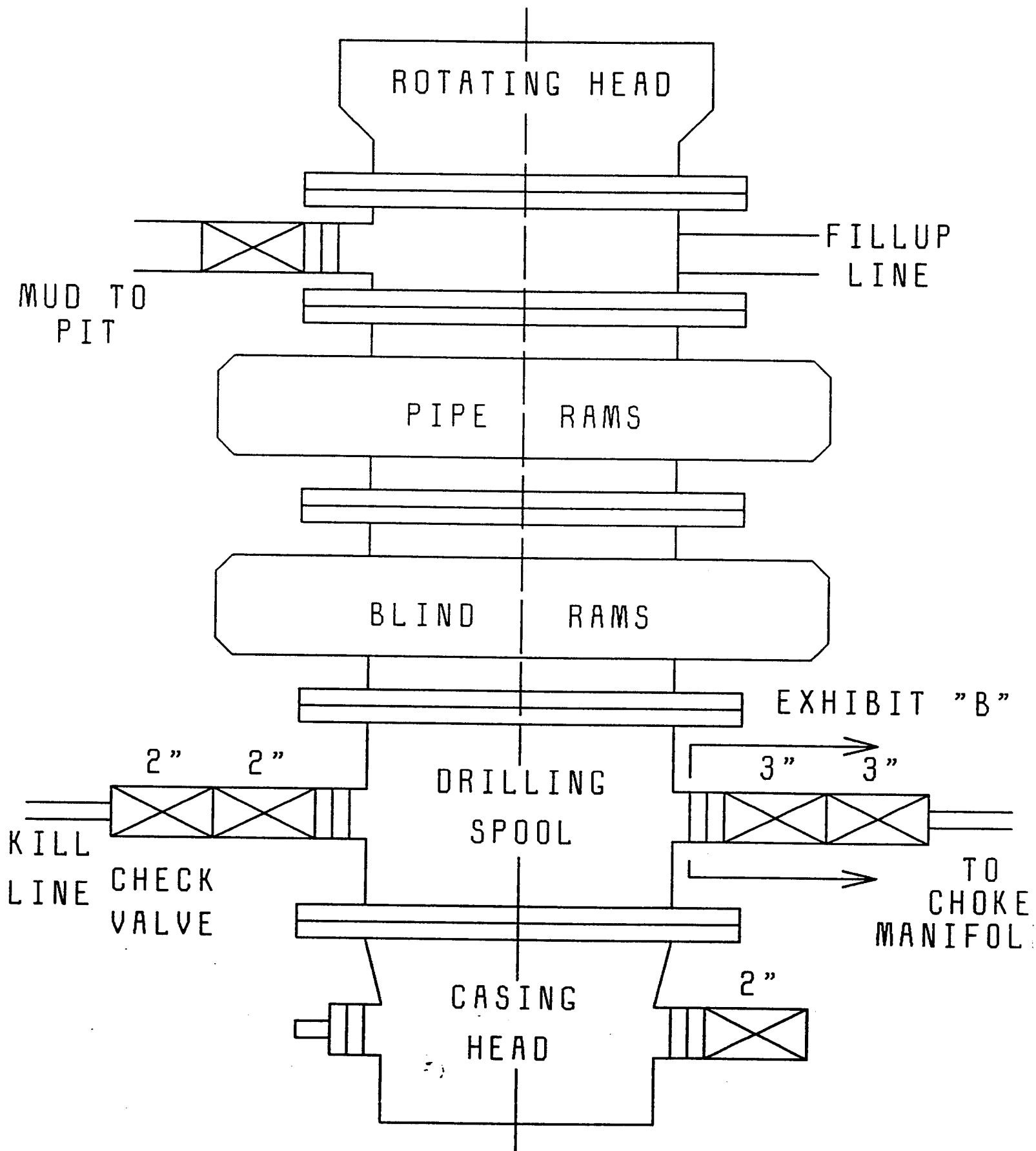
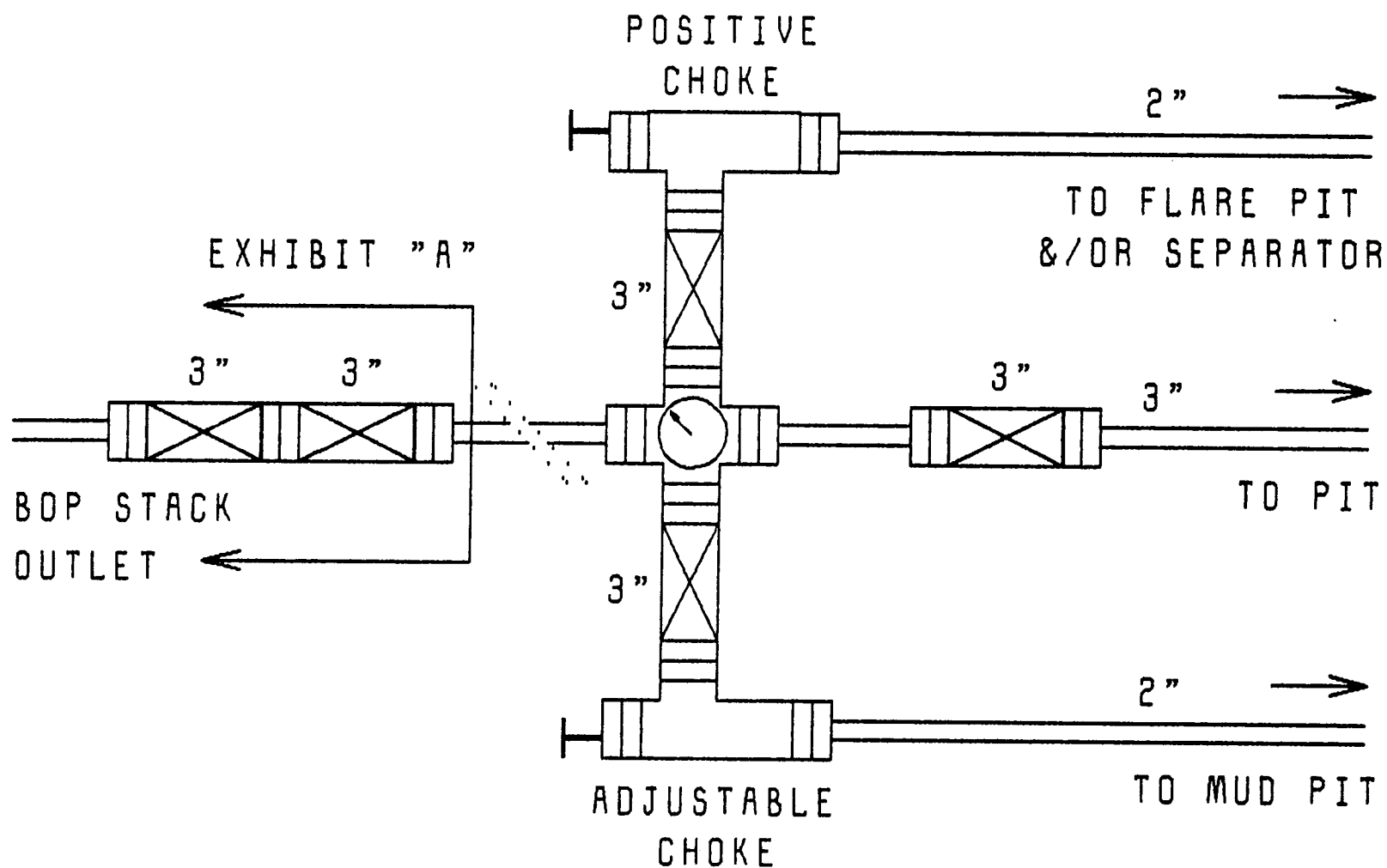


EXHIBIT "B"
CHOKE MANIFOLD



DETAILED DRILLING PROGRAM

DATE: 30 November, 1990

WELL NAME: Taipan 5F WELL NO.: 1

LOCATION: Section 5, Township 43S, Range 25E
2380' FNL, 2230' FWL
San Juan County, Utah

ELEVATION: 5,015' GR

TOTAL DEPTH: 6,090' GR

PROJECTED HORIZON: Primary target is Desert Creek at 5,910'.

DRILLING, CASING AND CEMENTING PROGRAM

1. Move in and rig up spud rig. Notify BLM of time of spud and intent to run surface casing.
2. Drill 12 1/4" hole to \pm 500'. Use fresh water gel/lime spud mud for drilling surface hole. Well bore inclination is not to exceed 1° at 500'. Deviation surveys will be run at least at 250' and at casing point.
3. Run 8 5/8", 24 lb/ft, K-55, STC casing to T.D. Cement with 371 sx (427 ft³) of Class 'G' cement with 2% CaCl₂ and 1/4 lb/sk Celloflake (sufficient slurry volume to circulate cement to surface). Release spud rig and W/O drilling rig.
4. Move in and rig up rotary rig. Nipple up BOP stack and related equipment. See BOP schematics for details.
5. Pressure test BOP to 2,000 psig for 30 minutes. Pressure test manifold and all related equipment to 2,000 psig. Pressure test casing to 1,500 psig for 30 min.
6. Drill out surface casing with 7 7/8" bit. Drill 7 7/8" hole to T.D. Deviation surveys are to be taken every 500' or on a bit trip, whichever occurs first. Maximum allowable deviation will be 5° at T.D., with the maximum allowable rate of change to be 1°/100'.
7. Run open hole logs and evaluate. Coring and/or drill stem testing will be as per wellsite geologist's recommendation.
8. If the well is determined to be productive, run 5 1/2", 15.5 lb/ft, K-55, STC casing to T.D. Set stage cementing collar at \pm 3,500'. In addition to placing centralizers over potential production zones, they will also be run to cover the aquifer sands of the Navajo and DeChelly formations, as per BLM stipulations. Cement production casing in two stages as per cementing program in 10-point Drilling Plan.

9. Nipple down BOPE. Set 5 1/2" casing slips and cut off casing. Install well head. Release drilling rig and move rig off location.
10. If well is non-productive it will be plugged and abandoned as per State, BLM and Navajo Tribal stipulations.

Taipan 5F Well No. 1
Section 5, Township 43S, Range 25E
2380' FNL, 2230' FWL
San Juan County, Utah

GENERAL COMPLETION PROCEDURE

If the well is determined to be productive, move in completion rig. Perforate, acidize, and test each productive porosity zone. Completion work will commence after Sundry Notice approval is received. Detailed procedures will follow.

PLUGGING AND ABANDONMENT

If the well is determined not to be productive, the well bore will be plugged as per BLM, State and Navajo Tribal requirements.

Taipan 5F Well No. 1
Section 5, Township 43S, Range 25E
2380' FNL, 2230' FWL
San Juan County, Utah

SURFACE USE PLAN

1. EXISTING ROADS

Shown on the attached topographic map are the existing roads in the immediate area. Outlined is the route to be followed from Montezuma Creek. Existing roads will be maintained, as necessary, while operations are in progress.

2. PLANNED ACCESS ROAD

The access road will be as shown on the attached topographic map. The road will be flat bladed, constructed 14' in width and will be maintained as necessary to prevent excessive damage to the existing terrain. The road will be upgraded if commercial production is established. It is anticipated that less than 1,000' of new road will need to be constructed to the location pad.

3. LOCATION OF EXISTING WELLS & TANK BATTERIES

There are no other producing wells or facilities in the immediate area.

4. LOCATION OF EXISTING AND PROPOSED FACILITIES

No production facilities are presently in place. Should the well prove to be productive, facilities (tank battery etc) will be sited on the drilling location pad.

5. LOCATION & TYPE OF WATER SUPPLY

Water will be acquired from the San Juan River or McElmo Creek and will be hauled using Chuska Energy Company water trucks, under State of Utah Division of Water Rights Permit Numbers 09-1724, (T64796) or 09-1723 (T64795).

6. SOURCE OF CONSTRUCTION MATERIALS

The need for additional construction materials is not anticipated. In the event that additional materials are required, they will be acquired either from private sources or with the approval of the Navajo Nation.

7. METHODS OF HANDLING WASTE MATERIAL

Trash will be contained on location in an enclosed bin. It will be hauled to an approved disposal site or burned on location if a burning permit is granted. The reserve pit will be lined, with an approved 7 mil liner, for containing drilling fluids. The pit will also be fenced. All drilling fluids, cuttings and chemical waste will be stored in the reserve pit. Liquid hydrocarbons will be stored in temporary storage tanks and hauled from location to approved sales facilities. The reserve pit will be emptied, back filled and restored to natural terrain status upon completion of drilling operations.

8. ANCILLARY FACILITIES

Chemical portable toilet facilities will be provided on location during drilling and completion operations. No camps or air strips are planned for this well.

9. WELL SITE LAYOUT

Attached is a surveyor's staking plat, cut and fill diagram and a schematic of the proposed rig layout.

10. PLANS FOR RESTORATION OF THE SURFACE

The location is laid out on a north east/south west trend and will require up to 25' of cut in the reserve pit (up to 7' of cut in the northern corner of the location pad) and up to 3' of fill elsewhere on the location pad. Top soil removed from the pad will be stored at the well site. A reserve pit will be built on terrain containing sparse native vegetation. After drilling operations are complete, drilling fluid in the reserve pit will be allowed to evaporate. All remaining fluid in the pit will be disposed of into an approved disposal site. The reserve pit will remain fenced during the evaporation and disposal process. The pit will then be covered and the topsoil will be returned to the disturbed area. The terrain will be returned as near to its original condition as possible. Following operations, rehabilitation seeding will be in accordance with APD/BLM/BIA stipulations. There are no residents in the immediate area of the site.

11. OPERATORS REPRESENTATIVE

CHUSKA ENERGY COMPANY
3315 BLOOMFIELD HIGHWAY
FARMINGTON, NEW MEXICO 87402
LARRY G. SESSIONS

12. CERTIFICATION

I hereby certify that either I, or persons under my direct supervision have inspected the proposed drill site and access route: that I am familiar with the conditions which presently exist: that the statements made in this plan are, to the best of my knowledge, true and correct and that the work planned will be performed by Chuska Energy, or its sub-contractors, in conformity with the terms and conditions under which it is approved.


LARRY G. SESSIONS
Operations Manager

CHUSKA ENERGY COMPANY

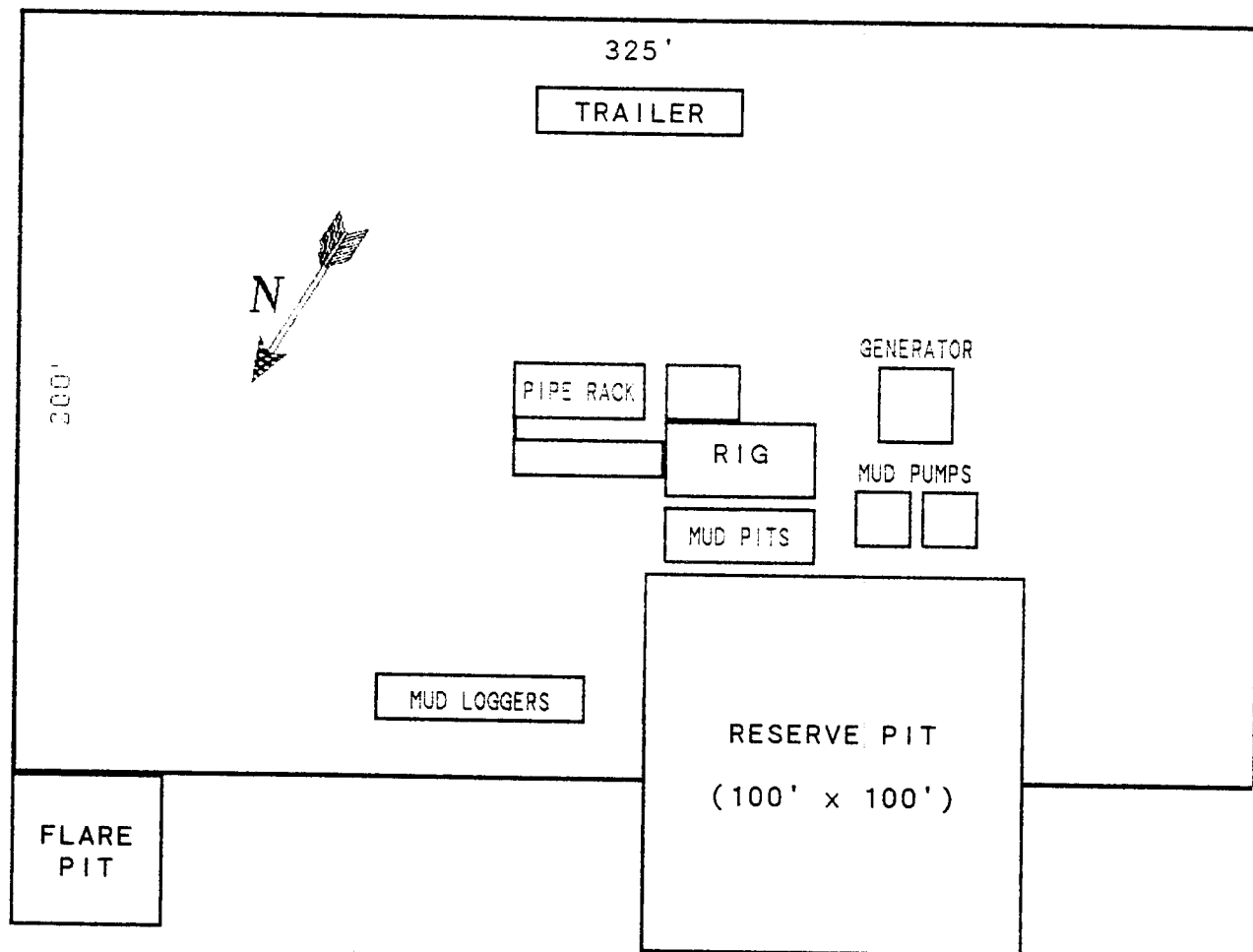
LOCATION LAYOUT

TAIPAN 5F-1

2380' FNL, 2230' FWL

SECTION 5, TOWNSHIP 43S, RANGE 25E

SAN JUAN COUNTY, UTAH



6	5 TAIPAN 5F-1	4	3	2	1
7	8	9	10	11 CORAL	12 1A-1
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

CHUSKA ENERGY COMPANY

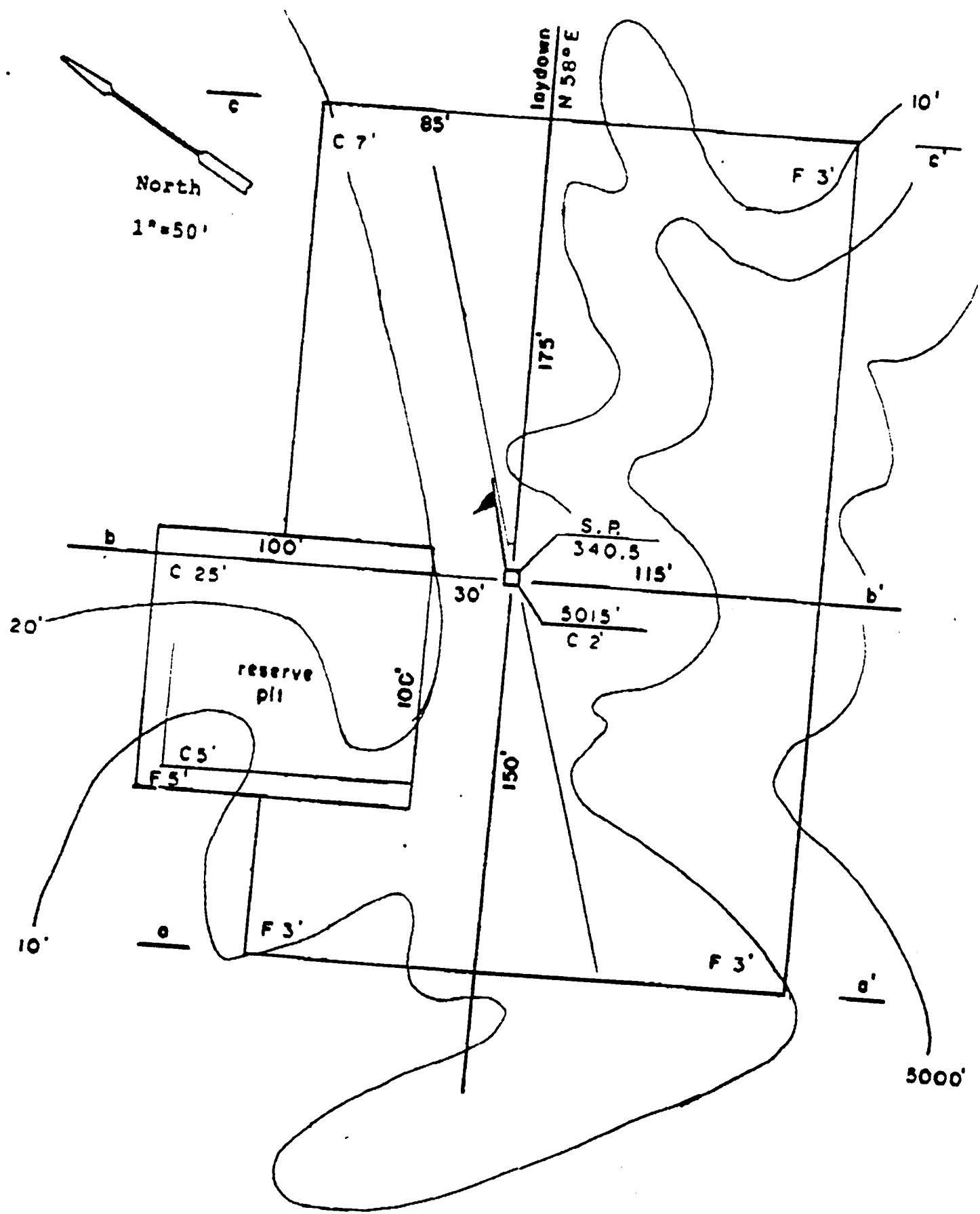
ACREAGE POSITION UNDER THE 1987 OPERATING AGREEMENT



CHUSKA: T43S-R25E, SAN JUAN COUNTY, UTAH


PLANVIEW SKETCH

Taipan 5 - F -

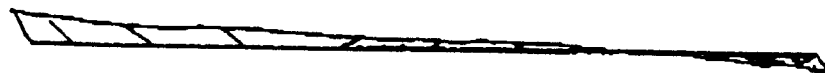


CROSS SECTION

Taipan 5 - P - 1

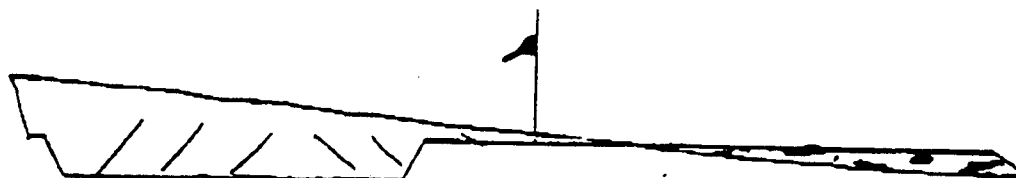
Cut // // // //
Fill 

1"=30' vert. & horz.



c

c'



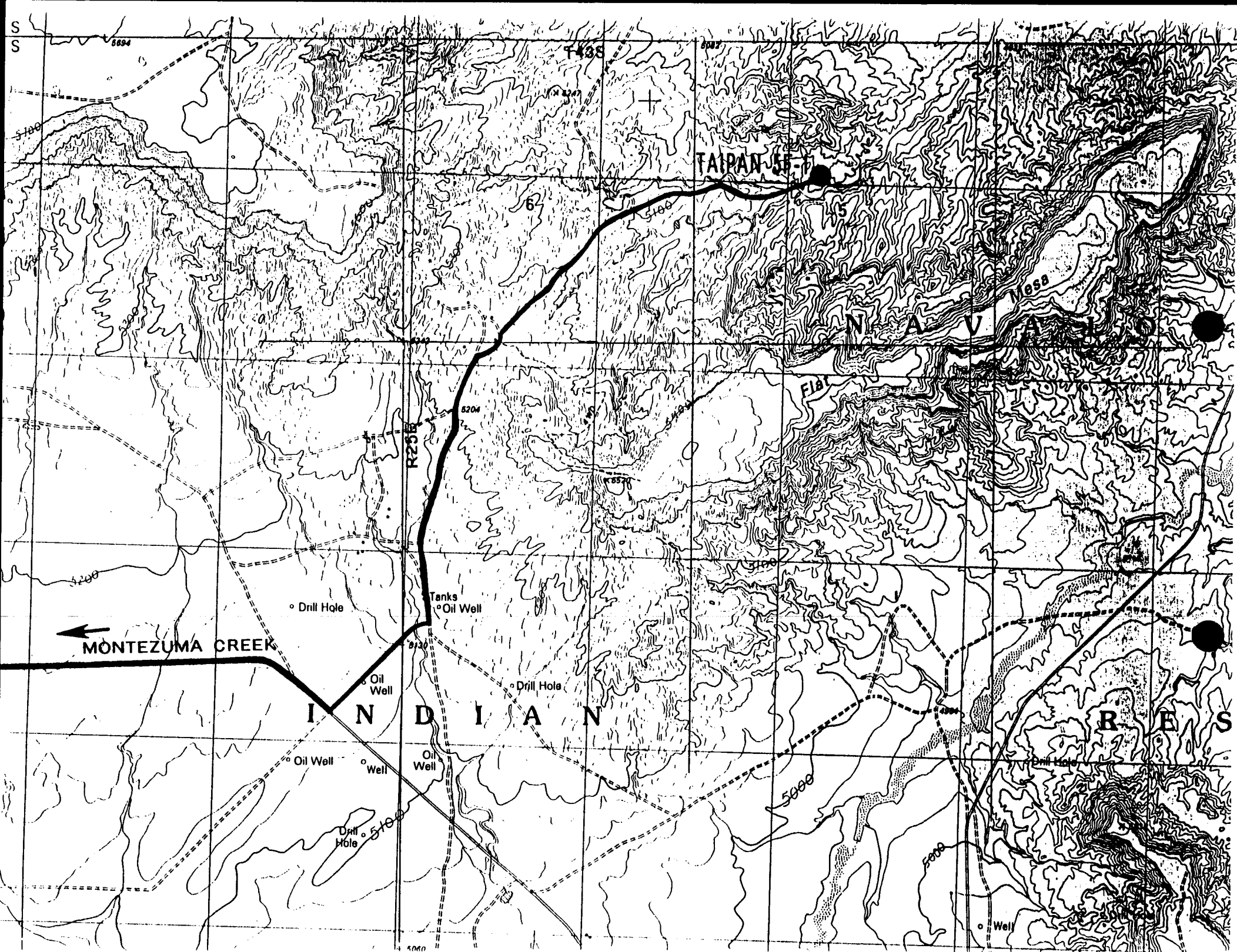
b

b'



a

a'



OPERATOR Chuska Energy Co 19090 DATE 10-10-90

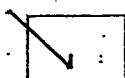
WELL NAME Laipan 5F #1

SEC SE 1/4 5 T 43S R 05E COUNTY San Juan

43.037.31594
API NUMBER

Indian (2)
TYPE OF LEASE

CHECK OFF:



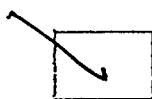
PLAT.



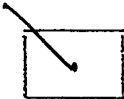
BOND



NEAREST
WELL



LEASE



FIELD
SLBM



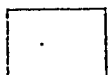
POTASH OR
OIL SHALE

PROCESSING COMMENTS:

No other well in Sec 5 of above township: Range.
water limit 09-1704 (T64796) 09-1703 (T64795)
Exception Location

APPROVAL LETTER:

SPACING:



R615-2-3

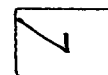
N/A
UNIT



R615-3-2



N/A
CAUSE NO. & DATE



R615-3-3

STIPULATIONS:

cc: BIA

CONFIDENTIAL
PERIOD
EXPIRED
ON 8-8-92



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter
Governor

Dee C. Hansen
Executive Director

Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

December 13, 1990

Chuska Energy Company
P. O. Box 780
Farmington, New Mexico 87499

Gentlemen:

Re: Taipan 5F #1 - SE NW Sec. 5, T. 43S, R. 25E - San Juan County, Utah
2380' FNL, 2230' FWL

Approval to drill the referenced well is hereby granted in accordance with Rule R615-3-3, Oil and Gas Conservation General Rules.

In addition, the following actions are necessary to fully comply with this approval:


1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of an Entity Action Form within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During Drilling, Form 7.
4. Prompt notification if it is necessary to plug and abandon the well. Notify R. J. Firth, Associate Director, (Office) (801) 538-5340, (Home) 571-6068, or Jim Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Rule R615-3-20, Gas Flaring or Venting, Oil and Gas Conservation General Rules.

Page 2
Chuska Energy Company
Taipan 5F #1
December 13, 1990

6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 538-6121.
7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31594.

Sincerely,



R. J. Firth
Associate Director, Oil & Gas

tas
Enclosures
cc: Bureau of Land Management
Bureau of Indian Affairs
J. L. Thompson
we14/1-20

WATER PERMIT OK

DIVISION OF OIL, GAS AND MINING

API NO. 43-037-31594

SPODDING INFORMATION

NAME OF COMPANY: CHUSKA ENERGY COMPANY

WELL NAME: TAIPAN 5F-1

SECTION SENW 5 TOWNSHIP 43S RANGE 25E COUNTY SAN JUAN

DRILLING CONTRACTOR AZTEC

RIG # 222

SPODDED: DATE 4-26-91

TIME 6:00 a.m.

HOW ROTARY

DRILLING WILL COMMENCE _____

REPORTED BY ROBERT NEELEY

TELEPHONE # 505-326-5525

DATE 4-25-91 SIGNED TAS

ENTITY ACTION FORM - FORM 6

ADDRESS 3315 Bloomfield Highway, Farmington, NM 87401

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	11225	43-037-31594	Taipan 5F#1	SE/NW	5	43S	25E	San Juan	4-25-91	
<p>WELL 1 COMMENTS:</p> <p>MIRU Aztec Rig 222. Spudded 2030 hrs, 4-25-91.</p> <p>Indian - Lease Field - Undesignated Unit - N/A</p> <p>Proposed Zone - Akah (Entity added 5-2-91. <i>g</i></p>											
2 COMMENTS:											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

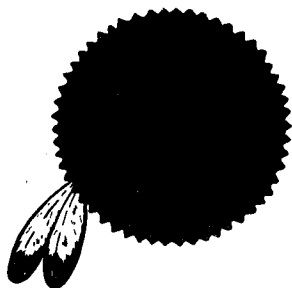
(3/89)

RECEIVED

MAY 02 1991

DIVISION OF
OIL GAS & MINING

[Signature]
Signature
Operations Engineer
Title
Phone No. 505-326-5525
42991
Date



CHUSKA ENERGY COMPANY

3315 BLOOMFIELD HIGHWAY • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

29 April, 1991

State of Utah Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Building, Suite 350
Salt Lake City, Utah 84180-1203

Ref: Sundry Notice: Taipan 5F #1 Well
Spud/Surface Casing

Gentlemen

Attached for your examination and approval are the original and two copies of the subject Sundry Notice.

Please advise if you require additional information concerning this submission.

Sincerely,


Larry G. Sessions
Operations Manager

LGS/csw
File: C:\WP51\TAIPAN.5F\SPUDSUN.CVR

encl.

RECEIVED

MAY 02 1991

DIVISION OF
OIL GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells. Use APPLICATION FOR PERMIT-- for such proposals.		6. Lease Designation and Serial Number NOG 8702-1116
		7. Indian Allottee or Tribe Name Navajo Tribal
		8. Unit or Communitization Agreement
		9. Well Name and Number Taipan 5F 1
1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other (specify)		10. API Well Number 43-037-31594
2. Name of Operator Chuska Energy Company		11. Field and Pool, or Wildcat Wildcat
3. Address of Operator 3315 Bloomfield Highway, Farmington, NM 87401		4. Telephone Number 505-326-5525
5. Location of Well Footage : 2380' FNL, 2230' FWL QQ, Sec. T., R., M.: SE/4 NW/4 S5 T43S R25E		County : San Juan State : UTAH
12. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
NOTICE OF INTENT (Submit in Duplicate)		SUBSEQUENT REPORT (Submit Original Form Only)
<input type="checkbox"/> Abandonment <input type="checkbox"/> New Construction <input type="checkbox"/> Casing Repair <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Change of Plans <input type="checkbox"/> Recompletion <input type="checkbox"/> Conversion to Injection <input type="checkbox"/> Shoot or Acidize <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Multiple Completion <input type="checkbox"/> Water Shut-Off <input type="checkbox"/> Other _____		<input type="checkbox"/> Abandonment * <input type="checkbox"/> New Construction <input type="checkbox"/> Casing Repair <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Change of Plans <input type="checkbox"/> Recompletion <input type="checkbox"/> Conversion to Injection <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Water Shut-Off <input checked="" type="checkbox"/> Other Spud/Surface Casing
Approximate Date Work Will Start _____		Date of Work Completion <u>4-26-91</u>
		Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form. * Must be accompanied by a cement verification report.

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

MIRU Aztec Rig 222. Spudded 2030 hrs, 4-25-91. Drilled to 525'. RU and ran 12 joints 8 5/8", 24 lb/ft, K-55, STC casing and landed at 520'. Cemented with 375 sx Class 'G' cement with 2% CaCl₂ and 1/4 lb/sk Celloflake. Displaced with water. Circulated 26 bbl slurry to pit. Notification of spud to State of Utah (Tammy Searing) at 0900 hrs, 4-25-91, by Robert Nealy.

RECEIVED

MAY 02 1991

DIVISION OF
OIL GAS & MINING

14. I hereby certify that the foregoing is true and correct

Name & Signature

Christopher S.W. Hill

Title Operations Engineer

Date 29 Apr 91

(State Use Only)

ORAL APPROVAL TO PLUG AND ABANDON WELL

Operator Chuska
 Representative ~~Japan~~ Chris Hill Telephone No 505-326-5525
 Well Name and No. Jaipon SF-1 25
 Location 1/4 1/4, Sec. 5 T. 43S R. 23E County San Juan
 Lease Type (Federal, Tribal, State or Private) NOG 8702-1116 Tribal
 Has operator obtained proper Federal or Tribal approval? Yes
 T. D. 5967 Open hole from 520' to 5967

Hole Size	Casing Size	Set at	TOC	Pull Casing?
<u>12 1/4</u>	<u>8 5/8</u>	<u>520</u>	<u>Surface</u>	
<u>7 1/8</u>				

Formation	Top	Base	Shows?

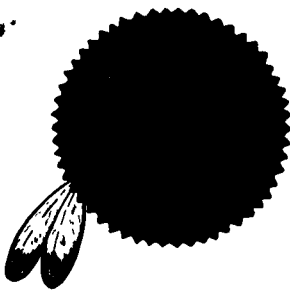
Plugging procedure:

#1	TD to 5636	195 sk Cl G	upper Laramie 150' above
#2	4870 to 4770	60 sk Cl G	Hermosa
#3	2997 to 2897	60 sk Cl G	Nexhaw
#4	1927 to 1827	60 sk Cl G	Chinle
#5	1179 to 1079	60 sk Cl G + 2% Pe Cl	Navajo
#6	570 to 470	55 sk Cl G + 2% Pe Cl	Surface casing shoe
#7	50' surface	25 sk Cl G + 2% Pe Cl	

Remarks: (DST's, LCZ's, Water flows, etc.)

Verbal approval

Approved by JR Matthew Date 5-7-91 Time 11:05 AM



CHUSKA ENERGY COMPANY

3315 BLOOMFIELD HIGHWAY • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

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9 May, 1991

DIVISION OF
OIL GAS & MINING

State of Utah Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Building, Suite 350
Salt Lake City, Utah 84180-1203

Ref: Sundry Notice: Taipan 5F 1 Well
Subsequent Notice of Abandonment

Gentlemen

Attached for your examination and approval are the original and two copies of the subject Sundry Notice.

Please advise if you require additional information concerning this submission.

Sincerely,


Larry G. Sessions
Operations Manager

LGS/csw
File: C:\WP51\TAIPAN.5F\2P&ASUN.CVR

encl.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

6. Lease Designation and Serial Number
NOG 8702-1116

7. Indian Allottee or Tribe Name

Navajo Tribal

8. Unit or Communitization Agreement

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.
Use APPLICATION FOR PERMIT-- for such proposals

1. Type of Well

☐ Oil Well

☐ Gas Well

☐ Other (specify)

2. Name of Operator

Chuska Energy Company

3. Address of Operator

3315 Bloomfield Highway, Farmington, NM 87401

4. Telephone Number

505-326-5525

9. Well Name and Number

Taipan 5F 1

10. API Well Number

43-037-31594

5. Location of Well

Footage : 2380' FNL, 2230' FWL

QQ, Sec. T., R., M.: SE/4 NW/4 S5 T43S R25E

County: San Juan

State: UTAH

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT

(Submit in Duplicate)

- | | |
|--|---|
| <input type="checkbox"/> Abandonment | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans | <input type="checkbox"/> Recompletion |
| <input type="checkbox"/> Conversion to Injection | <input type="checkbox"/> Shoot or Acidize |
| <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Vent or Flare |
| <input type="checkbox"/> Multiple Completion | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Other | |

Approximate Date Work Will Start _____

SUBSEQUENT REPORT

(Submit Original Form Only)

- | | |
|---|---|
| <input checked="" type="checkbox"/> Abandonment * | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans | <input type="checkbox"/> Recompletion |
| <input type="checkbox"/> Conversion to Injection | <input type="checkbox"/> Vent or Flare |
| <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Other | |

Date of Work Completion 5-8-91

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.

* Must be accompanied by a cement verification report.

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Plugged and abandoned as follows:

Plug	From	To	Sx	Zones Covered
1	5,967	5,636	195	Desert Creek, L Ismay, U Ismay
2	4,870	4,770	60	Hermosa
3	2,997	2,897	60	de Chelly
4	1,927	1,827	60	Chinle
5	1,179	1,079	60	Navajo

W.O.C. and tagged plug at 1,149'. Recemented with 60 sx cement W.O.C. and tagged plug at 1,039'.

6	560	460	55	Surface casing shoe
7	50	0	25	Surface

All plugs Class 'G' neat cement. Plugs 5, 5 recement, 6 and 7 contained 2% CaCl₂. All plugs displaced with mud. Rig released 1830 hrs, 5-8-91. Procedure witnessed by Kevin Schneider, BLM.

14. I hereby certify that the foregoing is true and correct

Name & Signature

Christopher S.W. Hill

Title

Operations Engineer

Date

9 May 91

(State Use Only)

ACCEPTED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE: 5-17-91

BY: [Signature]

(8/90)

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MAY 13 1991

DIVISION OF
OIL GAS & MINING



CHUSKA ENERGY COMPANY

1775 SHERMAN STREET - SUITE 1800 • DENVER, COLORADO 80203 • PHONE: (303) 863-7021
FAX #: (303) 863-7210

May 17, 1991

Ms. Vicki Kearney
Utah Oil & Gas Commission
355 West North Temple
Three Triad Center
Suite 350
Salt Lake City, Utah
84180-1203

Dear Ms. Kearney:

Please keep all Chuska Energy Company data confidential until further notice.

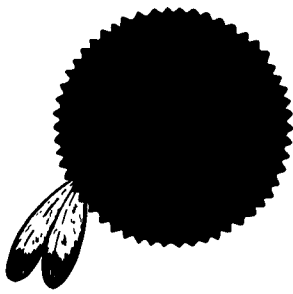
Thanks,

Herbert P. Mosca
Chuska Staff Geologist

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MAY 20 1991

DIVISION OF
OIL GAS & MINING



CHUSKA ENERGY COMPANY

3315 BLOOMFIELD HIGHWAY • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

22 May, 1991

State of Utah Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Building, Suite 350
Salt Lake City, Utah 84180-1203

Ref: Dry Hole Completion Report: Taipan 5F-1 Well

Gentlemen

Attached for your examination and approval is the original and two copies of the subject Dry Hole Completion Report.

Chuska requests that the information contained in this report be kept confidential.

Please advise if you require additional information concerning this submission.

Sincerely,

Larry G. Sessions
Larry G. Sessions
Operations Manager

LGS/csw
File: C:\WP51\TAIPAN.5F\CRCOVER

encl.

CONFIDENTIAL

RECEIVED

MAY 28 1991

DIVISION OF
OIL GAS & MINING

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☒ Other _____
b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFE. RESVR ☐ Other _____

2. NAME OF OPERATOR

Chuska Energy Company

3. ADDRESS OF OPERATOR

3315 Bloomfield Highway, Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)

At Surface

2380' FNL, 2230' FW

At top prod. interval reported below

Same

At total depth

Same

CONFIDENTIAL

5. LEASE DESIGNATION AND SERIAL NO.

NOG 8702-1116

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribal

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Taipan 5F

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., N., OR BLOCK AND SURVEY

04 ARE

S5 T43S R25E

14. API NO.

43-037-31594

DATE ISSUED

12-13-90

12. COUNTY

San Juan

13. STATE

Utah

15. DATE SPUDDED

4-25-91

16. DATE T.O. REACHED

5-6-91

17. DATE COMPL. (Ready to prod.)

5-8-91

(Plug & Abd.)

18. ELEVATIONS (OF, RKB, RT, OR ETC.)

5,015' GR/5,028' KB

19. ELEV. CASINGHEAD

5,015' GR

20. TOTAL DEPTH, MD &

5,967'(D)/5,966'(L)

21. PLUG BACK T.O., MD & TVD

Surface

22. IF MULTIPLE COMPL.,
HOW MANY

-

23. INTERVALS
DRILLED BY

ROTARY TOOLS

Rotary

CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)

25. WAS DIRECTIONAL
SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

DLL/MSFL/GR/CAL, LDT/CNL/MLT/GR/CAL
BHCS/GR/CAL27. WAS WELL CORED YES ☒ NO ☐ (Submit analysis)DRILL STEM TEST YES ☐ NO ☒ (See reverse side)

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8"	24	520	12 1/4"	375 sx 'G' + 2% CaCl ₂ Circulated 26 bbl slurry to pit	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33. PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump)					WELL STATUS (Producing or shut in) PA'd	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL - BBL.	GAS - MCF.	WATER - BBL.		GAS-OIL RATIO
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL - BBL.	GAS - MCF.	WATER - BBL.		OIL GRAVITY-API (CORR.)	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

35. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

Christopher S.W. Hill

TITLE

Operations Engineer

DATE

22 MAY 91

See Spaces for Additional Data on Reverse Side

INSTRUCTIONS

This form should be completed in compliance with the Utah Oil and Gas Conservation General Rules. If not filed prior to this time, all logs, tests, and directional surveys as required by Utah Rules should be attached and submitted with this report.

ITEM 18: Indicate which elevation is used as reference for depth measurements given in other spaces on this form and on any attachments.

ITEMS 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

ITEM 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

ITEM 33: Submit a separate completion report on this form for each interval to be separately produced (see instructions for items 22 and 24 above).

37. SUMMARY OF POROUS ZONES

Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut in pressures, and recoveries.

Formation	Top	Bottom	Description, contents, etc.
Core #1	5949	5967	Akah. Recovered 9'4" of 18' cut.

38.

GEOLOGIC MARKERS

Name	Top	
	Meas. Depth	True Vert. Depth
Hermosa	4820	4820
Upper Ismay	5686	5686
Hovenweep Shale	5744	5744
Lower Ismay	5756	5756
Gothic Shale	5770	5770
Desert Creek	5803	5803
Chimney Rock Shale	5913	5913
Akah	5924	5924

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MAY 28 1991

DIVISION OF
OIL GAS & MINING

FOUR CORNERS AREA U.S.A.
WELL DATA CARD

WELL NAME: Taipan 5-F-1

DESCRIPTIVE LOCATION: Section 5, T43S, R25E

Operator: Chuska Energy Company
Well Category: Wildcat Field: _____
Footings: 2380' FNL, 2230' FWL
Seismic S.P./Line: St. 340.5 on Line 500-33S
Elevations: 5015' G.L. 5030' K.B.
County: San Juan State: Utah
Rig: Aztec Well Service #222 Spud Date: 4/25/91
Release Date: 5/9/91 TD: 5966'
Well Status: Dry and Abandoned

~~~~~  
Formation Tops:

| Age      | Group/Formation  | Depths           |                | Thickness<br>(ft) |
|----------|------------------|------------------|----------------|-------------------|
|          |                  | Drilling<br>(ft) | Subsea<br>(ft) |                   |
| Triassic | Navajo           | 932              | + 4098         | 786               |
|          | Chinle           | 1718             | + 3312         | 1137              |
| Permian  | DeChelly         | 2855             | + 2175         | 225               |
|          | Organ Rock       | 3080             | + 1950         | 643               |
| Penn.    | Cedar Mesa       | 3723             | + 1307         | 972               |
|          | Hermosa          | 4695             | + 335          | 887               |
|          | Upper Ismay      | 5582             | - 552          | 80                |
|          | Hovenweep Sh.    | 5662             | - 632          | 22                |
|          | Lower Ismay      | 5684             | - 654          | 60                |
|          | Gothic           | 5744             | - 714          | 46                |
|          | Desert Creek     | 5790             | - 760          | 120               |
|          | Chimney Rock Sh. | 5910             | - 880          | 14                |
|          | Akah             | 5924             | - 894          |                   |

~~~~~  
EVALUATION:

CORES:

<u>Formation</u>	<u>Number</u>	<u>Interval</u>	<u>Cut Rec.</u>	<u>Log Correlation</u>
Akah/Paradox Salt	#1	5949-5967'	18'/9.3'	

WIRELINE LOGS:

<u>Log</u>	<u>Interval</u>	<u>Log</u>	<u>Interval</u>
GR	520-5965'	BHC Sonic	2500-5960'
DLL-MSFL	520-5965'	CNL-FDC Litho-Density	4000-5963'
Microlog	4000-5937'		

WELL DATA CARDPage TwoWell Name: Taipan 5-F-1FORMATION TESTS:

No.	Type	Interval	Formation	Flow Time	S.I. Time	Bottom Gauge IP/FP	Fluid	Ck	Remarks
-----	------	----------	-----------	--------------	--------------	--------------------------	-------	----	---------

1 CH

2 CH

3 CH

4 CH

ENGINEERING DATA:

<u>Casing Size</u>	<u>Shoe Depth</u>	<u>Perforations Formation</u>	<u>Interval</u>	<u>SPF</u>
8 5/8"	520'			

Formation Treatment:

<u>Type</u>	<u>Volume (gal)</u>	<u>Formation</u>
-------------	-------------------------	------------------

SUMMARY:

POST WELL AUDIT SUMMARY
TAIPAN 5-F-1

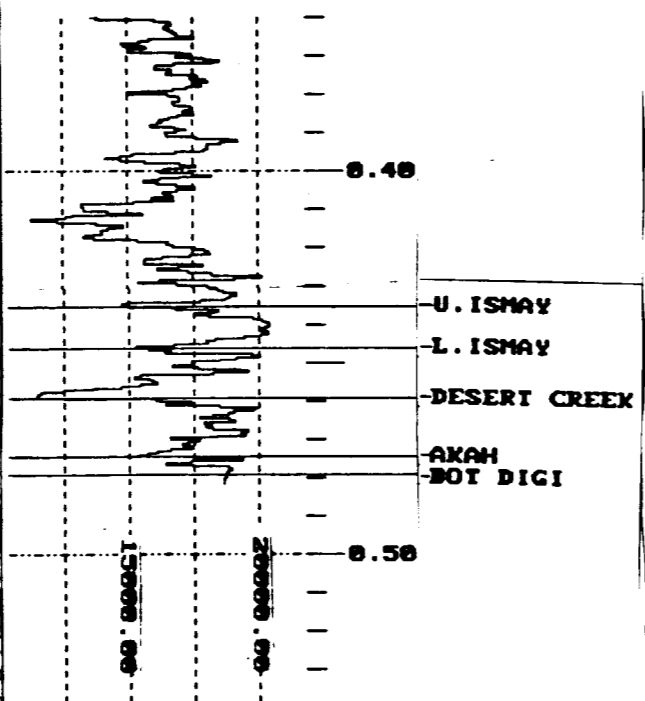
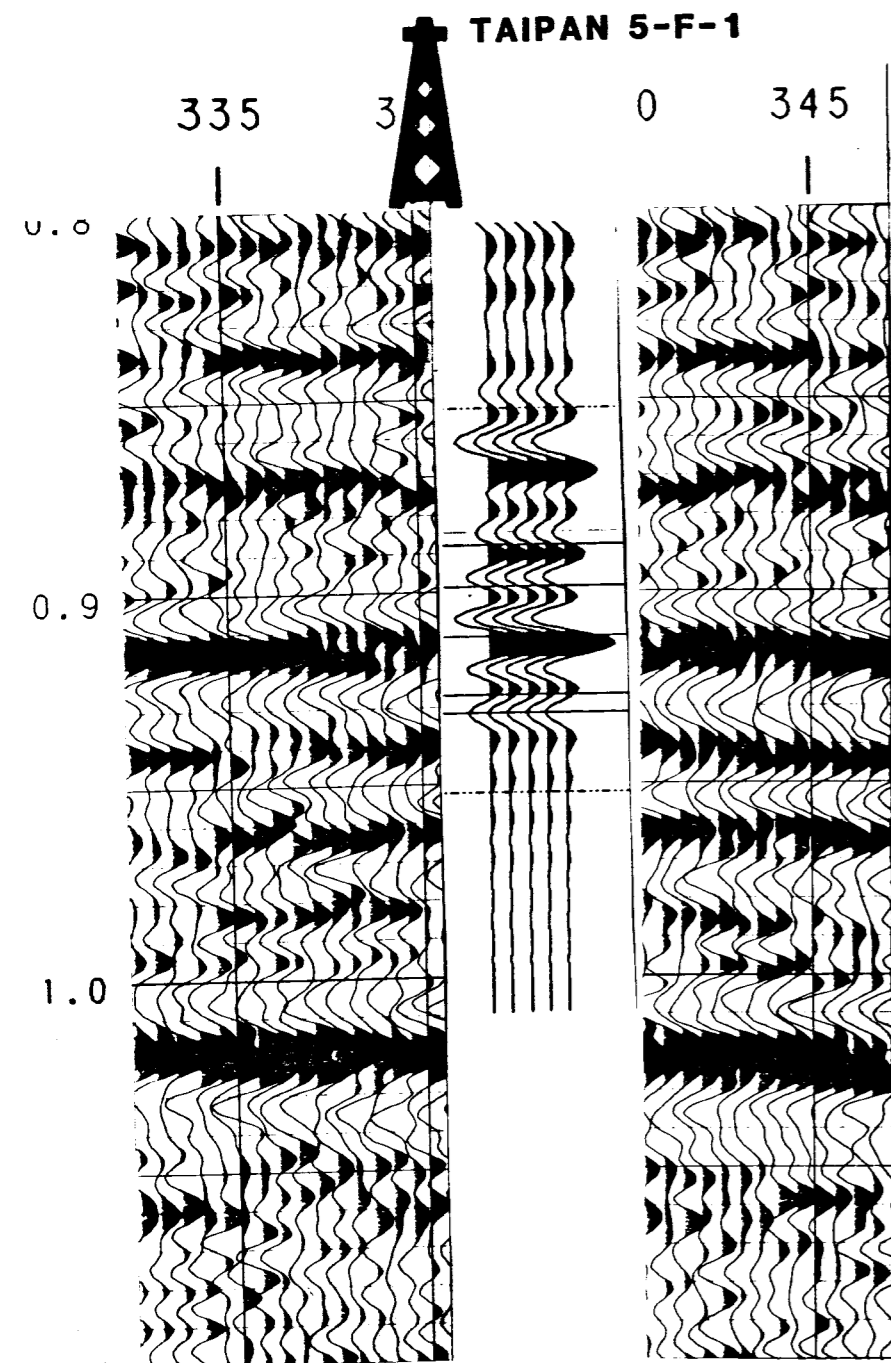
The Taipan 5-F-1 well was drilled to test a Desert Creek seismic anomaly on the downthrown side of the Anido Creek fault in Program 5. The mound signature displays a doubleton character with dimming of the Desert Creek reflector and an overlying shale drape. The top of the Desert Creek was prognosed at -895 feet; however, it was noted that the margin of error could be substantial due to the lack of subsurface control in the area.

The well encountered the top of the Desert Creek at -760 feet, 135 feet high to prognosis. The well in SE NW Section 31, T42S, R25E (1.5 miles northwest of the Taipan location) was used for velocity control and time depth conversion. This well set in a similar topographic setting as the Taipan well; however, it was on the high side of the north-south fault which defines the east flank of the Defiance Uplift and Taipan is on the low block. This paleofeature must account for the rapid velocity change (150 feet/ms -- 2 way time) between the Section 31 well and Taipan. Whereas there is only 13 feet/ms change between Taipan and the Section 2 well three miles to the east and this well is located on a predominant (Yellow Rock Point) topographic feature.

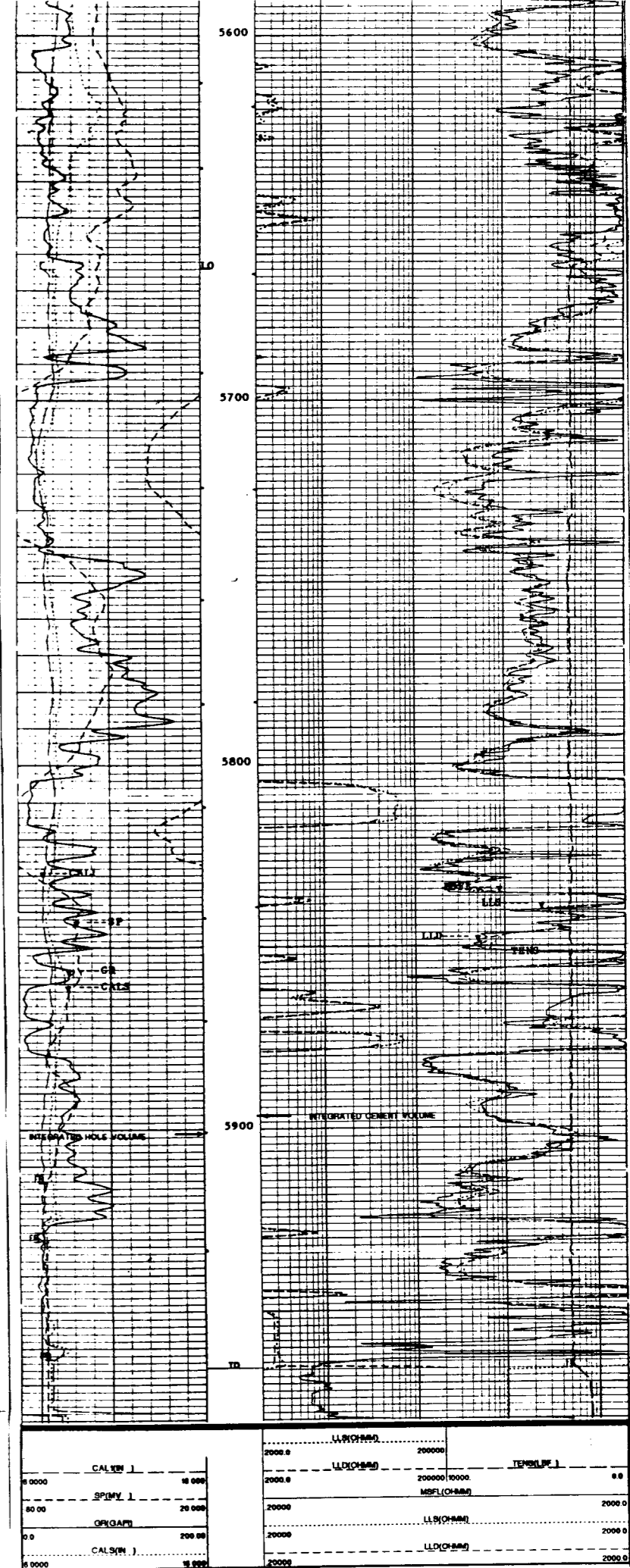
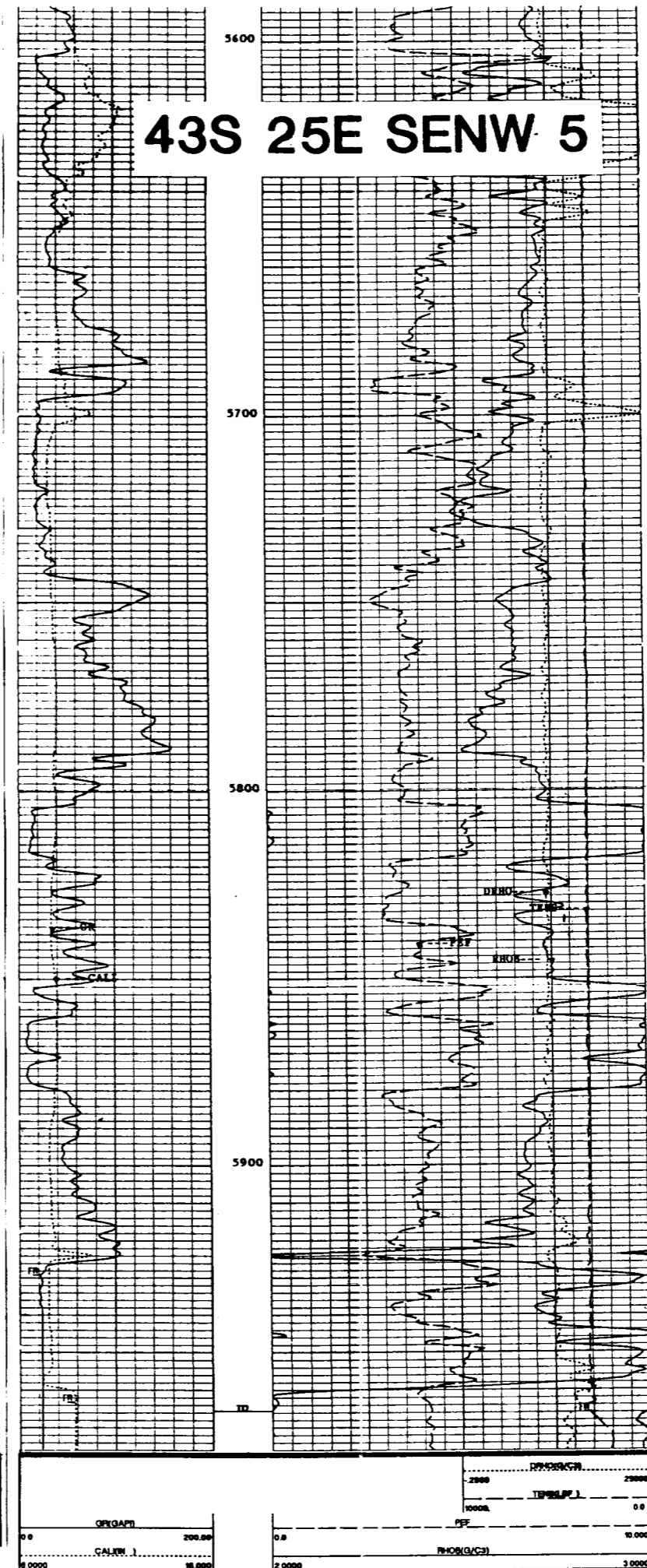
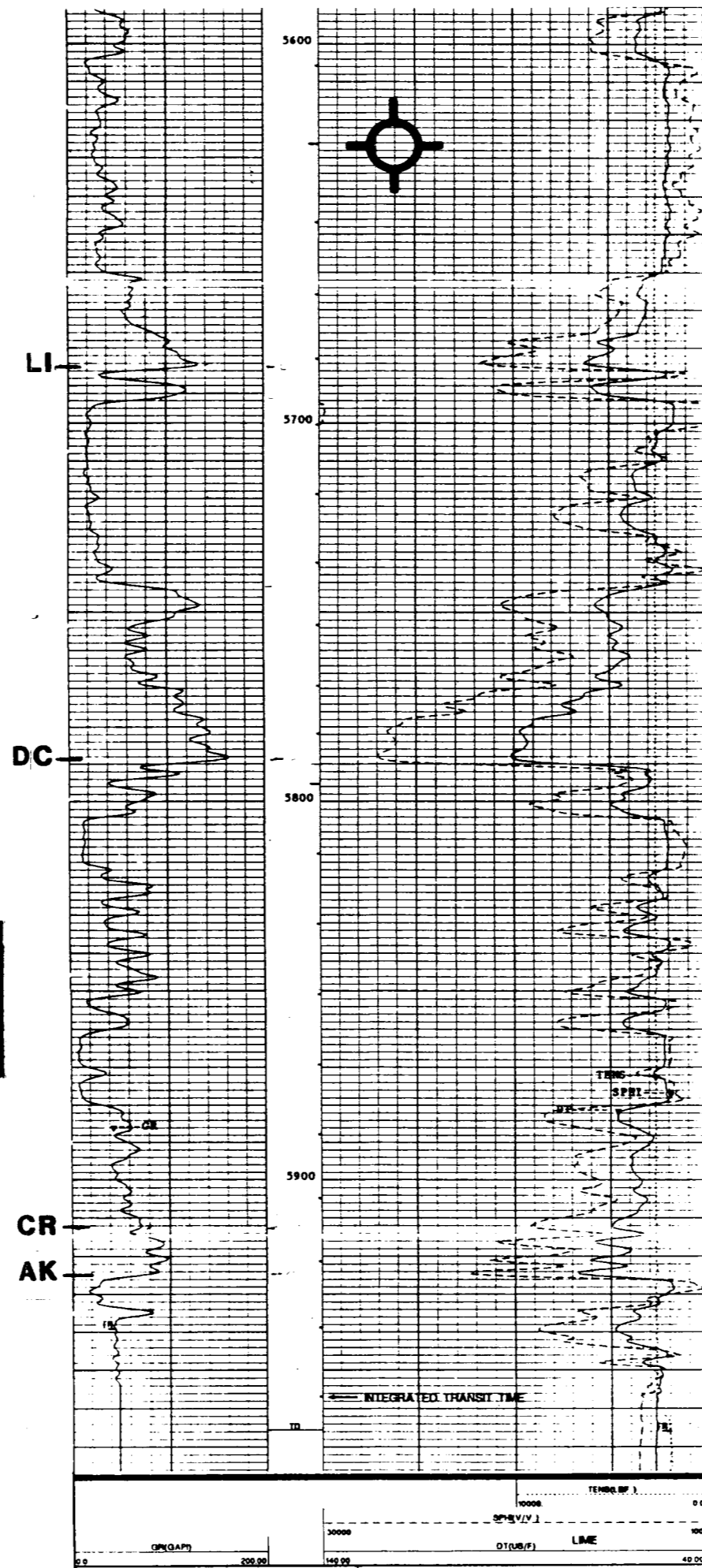
The Desert Creek Carbonate section is non-mound involved and is only 87 feet thick. The section contains a typical off-mound lithology containing a high silt content and being tight. The Lower Anhydrite section was in excess of 20 feet thick. There were no mound limestones in the Upper or Lower Desert Creek.

Taipan was mapped as a small, one line stratigraphic feature in which we were anticipating fracture enhancement related to the salt edge. The only near mound indicator, even though subtle, was the thicker than normal Lower Desert Creek Anhydrite.

The best explanation for the mismatch between the Taipan synthetic and seismic data is that the feature seen on the seismic data was focused from offline, potentially as much as 400 feet offline. Even if this is the case and since there was no fault enhancement from drape over the salt edge, any remaining reservoir potential would be too small to be economical.



PROGRAM 5
SEISMIC LINE 500-33S



U.S.A.
FOUR CORNERS AREA - NAVAJO PROJECT
COMPOSITE WELL LOG
TAIPAN
5-F-1
SCALE 1"= 500'

WELL LOCATION: T43S R25E S5 SE NW
FOOTINGS: 238' FNL 2230' FEL
SEISMIC LINE / SHOT POINT: 500-33S / 340.5
ELEVATIONS: G.L. 5015 ft. K.B. 5029 ft.

STATE: Utah
COUNTY: San Juan
BASIN: Paradox
GEOLOGIST: _____

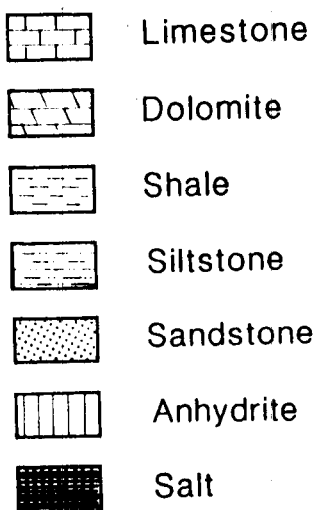
WELL CATEGORY: Exploration
COMPLETION: P & A
TOTAL DEPTH: Driller: 5967 ft.
Logger: 5967 ft.

SPUD DATE: 26/4/91
T.D. DATE 7/5/91
RIG RELEASED: 8/5/91

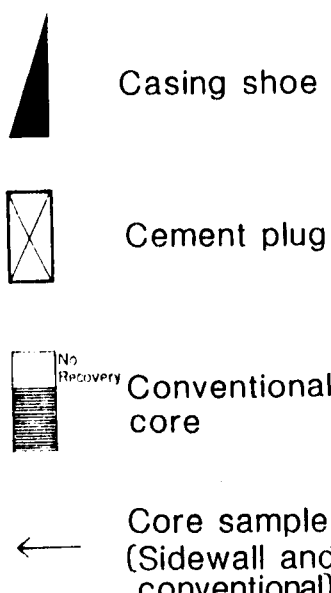
HOLE Size: 12 1/4 in. 7 7/8 in.
Depth: 525 ft. ft.
CASING Size: 8 5/8 in. 5 1/2 in.
Depth to shoe: 520 ft. ft.
TUBING Size: 2 7/8 in. Depth: ft.

DRILLING RIG Energy Search Rig 2
MUD LOGGING Rocky Mountain Geo Engineering
WIRELINE LOGGING Schlumberger
WIRELINE LOGS RUN LDT /CNL- GR--DLL-MSFL-BHC-S- CAL-ML

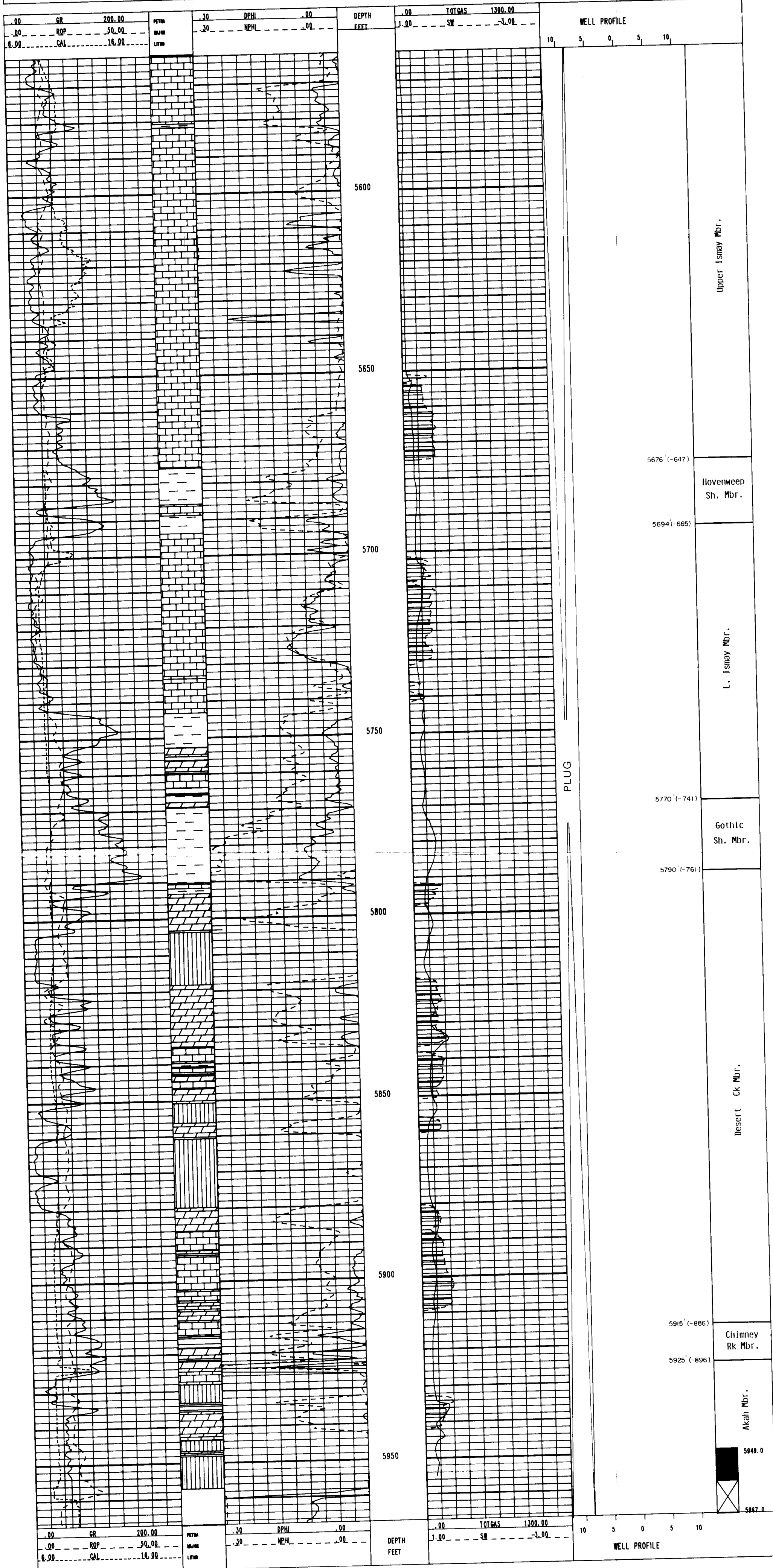
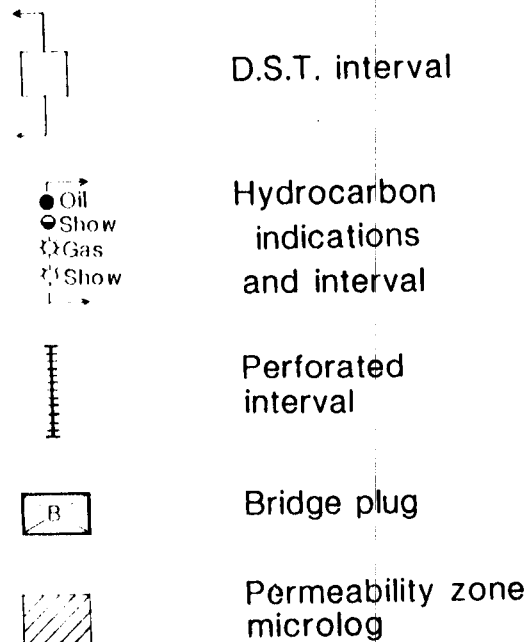
ROCK TYPES



LEGEND



SYMBOLS



LOG INTERPRETATION

WELL: TAIPAN 5F – 1 AUTHOR: M.D.BERRY COMPANY: MAGELLAN

OPERATOR: CHUSKA ENERGY

FIELD: WILDCAT

LOCATION: 2380' FNL, 2230' FWL

SECTION: 5

TOWNSHIP: 43S

RANGE: 25E

INTERVAL: 5582' – 5967'

TOTAL DEPTH: DRILLER: 5967'

LOGGER: 5966'

ELEVATIONS: KB: 5030'

GL: 5015'

DATUM: MEAN SEA LEVEL

STATUS: PLUGGED & ABANDONED

TYPE OF FLUID IN HOLE: DISPERSED

DENSITY: 9.5 ppg

VISCOSITY: 40.0 S

pH: 11.5

FLUID LOSS: 14.0 C3

SOURCE OF SAMPLE: FLOWLINE

RM: 1.07 ohm-m @ 58 °F

RMF: 8.02 ohm-m @ 58 °F

RMC: 1.61 ohm-m @ 58 °F

MAX. RECORDED TEMP: 130 °F

MEAN SURFACE TEMP.: 65 °F

STABILISED BHT: —

POROSITY, ϕ , (PHI) :- NEUTRON DENSITY, HYDROCARBON CORRECTED
(NO CORE DATA AVAILABLE)
 ρ_w =2.71, ρ_r =1.0

WATER SATURATION (SW) : FORMULA USED : ARCHIE

m = 2

n = 2

a = 1

Rw(ohm-m)

INTERVAL (FT.)

TEMP.(°F)

SALINITY (ppm)

.035

@5850'

128.7

136.000

NOTE : HYDROCARBON SATURATION, (SH) = 1-SW
HYDROCARBON DENSITY, ρ_h , (RH) = COMPUTED

LITHOLOGY COEFFICIENTS:

	INTERVAL (FT)	Pe (dol)	GR (dol)	RHOB (dol)	DT (dol)
DOLOMITE	5753 – 5920; 5928 – 5957	3.14	20	2.85	—
	5920 – 5928	3.14	20	—	44
LIMESTONE	5753 – 5920; 5928 – 5957	Pe (ls)	GR (ls)	RHOB (ls)	DT (ls)
	5562 – 5753; 5920 – 5928	5.08	20	2.71	—
SHALE		5.08	20	—	49
		Pe (sh)	GR (sh)	RHOB (sh)	DT (sh)
ANHYDRITE	5562 – 5753; 5920 – 5928	3.4	180	—	90
	5753 – 5920; 5928 – 5957	3.4	180	2.5	—
POROSITY		Pe (an)	GR (an)	RHOB (an)	DT (an)
	5804 – 5818; 5851 – 5856	5.05	10	2.98	—
	5861 – 5880; 5928 – 5933	Pe (por)	GR (por)	RHOB (por)	DT (por)
	5944 – 5957				
	5562 – 5753; 5920 – 5928	.36	10	—	189
	5753 – 5804; 5818 – 5851	.36	10	1.0	—
	5856 – 5861; 5880 – 5920				
	5933 – 5944				

JULY 1991

